Annual Drinking Water Quality Report

CHARLESTON

IL0290100

Annual Water Quality Report for the period of January 1 to December 31, 2021

This report is intended to provide you with important information about your drinking water and the efforts made by the water system to provide safe drinking water.

The source of drinking water used by CHARLESTON is Surface Water

For more information regarding this report contact:

Name Trevor Stewart

217-345-2977

217-345-297 Phone

Este informe contiene información muy importante sobre el agua que usted bebe. Tradúzcalo ó hable con alguien que lo entienda bien.

Source of Drinking Water

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

Contaminants that may be present in source water include:

- Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.
- Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, and septic systems.
- Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.

Drinking water, including bottled water, may reasonably be expected to contain at least sm amounts of some contaminants. The presence o contaminants does not necessarily indicate th water poses a health risk. More information contaminants and potential health effects can obtained by calling the EPAs Safe Drinking Wa Hotline at (800) 426-4791.

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit amount of certain contaminants in water provi by public water systems. FDA regulations esta limits for contaminants in bottled water whic must provide the same protection for public health.

Some people may be more vulnerable to contami in drinking water than the general population

Immuno-compromised persons such as persons wi cancer undergoing chemotherapy, persons who hundergone organ transplants, people with HIV/or other immune system disorders, some elderl infants can be particularly at risk from infections. These people should seek advice a drinking water from their health care provide EPA/CDC guidelines on appropriate means to le the risk of infection by Cryptosporidium and microbial contaminants are available from the Drinking Water Hotline (800-426-4791).

If present, elevated levels of lead can cause serious health problems, especially for pregn women and young children. Lead in drinking wa is primarily from materials and components associated with service lines and home plumbi We cannot control the variety of materials us plumbing components. When your water has been sitting for several hours, you can minimize t potential for lead exposure by flushing your for 30 seconds to 2 minutes before using wate drinking or cooking. If you are concerned abo lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can tak minimize exposure is available from the Safe Drinking Water Hotline or at http://www.epa.gov/safewater/lead.

* Please Post Until 8/15/22 *

Campus Scheduling

JUN 9 2572

Eastern Illinois University MLK Jr. University Union

on market of a meeting than

The state of the s

Source Water Information

Source Water Name

Type of Water Report Status Location

INTAKE (01670) LAKE CHARLESTON

SW _____

SW

INTAKE (01680) EMBARRAS RIVER

Source Water Assessment

We want our valued customers to be informed about their water quality. If you would like to learn more, please feel welcome to attend any of our regularly scheduled meetings. The source water assessment for our supply has been completed by the Illinois EPA. If you would like a copy of this information, please ϵ by City Hall or call our water operator at $\frac{217-345-2977}{1}$. To view a summary version of the completed Source Water Assessments, including: Importance of Source Water; Susceptibility to Contamination Determination; and documentation/recommendation of Source Water Protection Efforts, you may access the Illinois F website at http://www.epa.state.il.us/cgi-bin/wp/swap-fact-sheets.pl.

Source of Water: CHARLESTONIllinois EPA considers all surface water sources of public water supply to susceptible to potential pollution problems. Hence the reason for mandatory treatment of all public water supplies in Illinois. Mandatory treatment includes coagulation, sedimentation, filtration and disinfection. Primary sources of pollution in Illinois lakes can include agricultural runoff, land disposal (septic systems) and shoreline erosion.

(26/2022 TIN200100 2021 2022-05-26 11-20-25 DDD

Lead and Copper

Definitions:

goal or MRDLG:

na:

Action Level Goal (ALG): The level of a contaminant in drinking water below which there is no known or expected risk to health. ALGs allow for a margin of safety.

Action Level. The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow

Lead and Copper	Date Sampled	MCLG	Action Level (AL)	90th Percentile	# Sites Over AL	Units	Violation	Likely Source of Contamination
Copper	09/30/2020	1.3	1.3	0.093	0	ppm	N	Erosion of natural deposits; Leaching wood preservatives; Corrosion of house plumbing systems.
Lead	09/30/2020	0	15	2.6	0	ppb	N	Corrosion of household plumbing system Erosion of natural deposits.

Water Quality Test Results

The following tables contain scientific terms and measures, some of which may require explanation. Definitions:

Regulatory compliance with some MCLs are based on running annual average of monthly samples. Avg:

A Level 1 assessment is a study of the water system to identify potential problems and determine (if possible) why Level 1 Assessment:

total coliform bacteria have been found in our water system.

A Level 2 assessment is a very detailed study of the water system to identify potential problems and determine (if Level 2 Assessment:

possible) why an E. coli MCL violation has occurred and/or why total coliform bacteria have been found in our water

system on multiple occasions.

The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible Maximum Contaminant Level or MCL:

using the best available treatment technology.

Maximum Contaminant Level Goal or MCLG: The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow

for a margin of safety.

Maximum residual disinfectant level or The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a MRDL:

disinfectant is necessary for control of microbial contaminants.

The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not Maximum residual disinfectant level

reflect the benefits of the use of disinfectants to control microbial contaminants.

not applicable.

millirems per year (a measure of radiation absorbed by the body) mrem:

micrograms per liter or parts per billion - or one ounce in 7,350,000 gallons of water: ppb:

Water Quality Test Results

ppm:

milligrams per liter or parts per million - or one ounce in 7,350 gallons of water.

Treatment Technique or TT:

A required process intended to reduce the level of a contaminant in drinking water.

ヘンと / シレンン

TIUSUUIUU SUSI SUSS UE SE 11 SU SE DUE

Regulated Contaminants

Disinfectants and Disinfection By- Products	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Bromate	2021	1.3	0 - 1.3	0	10	dqq	N	By-product of drinking water disinfection
Chloramines	12/31/2021	1.7	1 - 2	MRDLG = 4	MRDL = 4	ppm	N	Water additive used to control microbes.
Haloacetic Acids (HAA5)	2021	8	2.6 - 11.94	No goal for the total	60	ppb	N	By-product of drinking water disinfection
Total Trihalomethanes (TTHM)	2021	21	10.79 - 26.2	No goal for the total	80	ppb	N	By-product of drinking water disinfection
Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Arsenic	2021	1	1.1 - 1.1	0	10	ppb	N	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electroni production wastes.
Barium	2021	0.014	0.014 - 0.014	2	2	mqq	И	Discharge of drilling wastes; Discharge f metal refineries; Erosion of natural depo
Fluoride	2021	0.7	0.746 - 0.746	4	4.0	ppm	N	Erosion of natural deposits; Water additi- which promotes strong teeth; Discharge fr- fertilizer and aluminum factories.
Nitrate [measured as Nitrogen]	2021	0.41	0.41 - 0.41	10	10	mqq	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Selenium	2021	2	1.5 - 1.5	50	50	ppb	И	Discharge from petroleum and metal refine. Erosion of natural deposits; Discharge fromines.
Sodium	2021	14	14 - 14			ppm		Erosion from naturally occuring deposits. Used in water softener regeneration.

Turbidity

	Limit (Treatment Technique)	Level Detected	Violation	Likely Source of Contamination
Highest single measurement	1 NTU	0.2 NTU	N	Soil runoff.

Information Statement: Turbidity is a measurement of the cloudiness of the water caused by suspended particles. We monitor it because it is a good indicator of water quality and the effectiveness of our filtration system and disinfectants.

95PT

Lowest monthly % meeting limit	0.3 NTU	100%	N	Soil runoff.	

Information Statement: Turbidity is a measurement of the cloudiness of the water caused by suspended particles. We monitor it because it is a good indicator of water quality and the effectiveness of our filtration system and disinfectants.

Total Organic Carbon

The percentage of Total Organic Carbon (TOC) removal was measured each month and the system met all TOC removal requirements set, unless a TOC violation is noted in the violations section.